Flight Summary MACPEX 11 APR 2011

General Information

Flight date- 11 APR 2011 Flight duration – 5.2 hours

Crew - HEI/DOM

Instruments flown: 2DS, ALIAS, CPI, CIMS, CLH, DLH, FCAS, FCDP, FISH, HARWV, HARHAL, HVPS, JLH, MMS, NMASS, O3, O3LITE, PALMS, SID3,

ULH, SP2, VIPS

1107 Takeoff 1615 Land

Flight Log Engine Start 1052

Data Rec 1050 Begin 1506 Landing 1615

On Descent

Gear extension/retractions

 Gear Up
 1108

 Gear Down
 1610

Weather Observations Ascended through cloud deck shortly after takeoff. Above and in clear air in route to way point 2, crossed over distinct storm front. Approaching redefined point 3 just above and to the SW of cirrus layer at FL380. Vectored West and descended into the tops at FL368 for approximately 10 minutes. Clear air between next waypoints and though wispy cirrus appear significantly above our altitude it did not appear to be solid or continuous enough to reach for the short period evident.

Returning Westerly noted blow of from anvil of convective storm line above route, FL 330-FL365. Ascended into this formation for the short extent the formation existed. Clear air during the return legs.

Flight Profile

Transit to range uneventful. Transit at FL520 to point 2 with slow decent to initial point 3 as defined by sat phone from Theroy. Descended into IP at FL380 Diverted, PD, to West and decended into could deck at FL360 before returning to planned flight profile. Vectored from point 4 to point 6 per direction from Theory. Spriral Ascent from point 6 was not possible due to ATC conflicts. Spiraled up West of point 6 in clear air and began the return legs. Attempts were made to complete slightly shortened route per Theory, due to fuel state and expected strong headwinds upon return.

RTB at FL570 with stair ascents and dwell at FL470, FL510, FL550. Reached max altitude of FL575 before beginning slow no gear decent.

MMS maneuvers during low altitude hold at 4,000'.

Instrument Notes

PALMS fail on initial start up probably due to power inadvertently applied prior to generator crossover. Most likely power switch thrown during crew insertion. Action per checklist; reset 1X.

SID3 did not connect to server on start up. Most likely due to operator error in multiple mouse clicks starting multiple program starts. Software shut down per normal method and restarted successfully.

HARHAL fail light at 1555 on decent below 6,000'. No action per checklist. HARVWV fail below 3,000'. No action per checklist.